

Abstract

The invention relates to a flowmeter (1) comprising at least two ultrasonic transducers (2, 3) that are mounted on a container (7) which is penetrated by a medium (9) in a certain direction of flow (S). Said ultrasonic transducers (2, 3) alternately transmit and receive ultrasonic test signals in the direction of flow (S) and counter to the direction of flow (S). The inventive flowmeter (1) further comprises a control/evaluation unit (6) which determines and/or monitors the volume flow of the medium (9) inside the container (7) based on the difference in the travel time of the ultrasonic test signals propagating in the direction of flow (S) and counter to the direction of flow (S). The inventive ultrasonic transducers (2, 3) are configured such that they transmit and receive ultrasonic test signals or sound fields having a large aperture angle (g) or a great beam expansion.